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December 7, 2011

**Ex Parte**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92;  
In the Matter of a National Broadband Plan for Our Future, GN 09-51**

Dear Ms. Dortch:

Curtis L. Groves and I of Verizon met Monday with Marius Schwartz, Chief Economist of the Commission, to discuss issues related to IP interconnection and the eventual transition away from the PSTN. We reiterated Verizon's position that the Commission should allow IP interconnection to evolve through negotiated commercial agreements, much like the open Internet model that has produced a fully interconnected network in the absence of regulatory mandates.

As we explained, companies like Verizon have market-based incentives to negotiate commercial agreements to govern IP-to-IP interconnection, and proscriptive regulatory requirements would interfere with the market-led efforts already underway to deploy IP interconnection efficiently by causing funds that could otherwise be spent on broadband deployment to be diverted.

To facilitate the discussion, we shared a Powerpoint presentation, attached to this *ex parte* notice, that depicts the way interconnection has evolved, from the breakup of the Bell system through the 1996 Communications Act to the introduction of competitive local exchange carriers, wireless providers, and eventually VoIP providers. We explained that the 1996 Act was based on a legacy network architecture, and that because the VoIP architecture is very different from the legacy PSTN architecture, overlaying an IP interconnection requirement on top of yesterday's network would be wholly inefficient and would derail efforts to develop efficient, IP-based networks of tomorrow.

We explained that in the legacy PSTN, which is based on Time Division Multiplexing (TDM) technology, the provider delivering the call to the terminating company must carry the traffic all the way to the call recipient's local calling area, and it must either build the facilities to carry the traffic or lease them from another carrier. For VoIP traffic that originates and terminates in IP, by contrast, there can be far fewer points

of interconnection, at which companies can efficiently aggregate traffic for delivery. As a result, it would not make sense to replicate the local-delivery model that prevails in the TDM world.

To be sure, this efficiency is one of the benefits of IP interconnection, and it is one of many reasons why the market will evolve there on its own. But this complication is but one reason why the Commission should resist the urge to dictate a regulatory solution. A government mandate could impose standards that do not fully take advantage of the more advanced technology and network configuration, inadvertently resulting in more costly interconnections that impose unnecessary costs on consumers. And displacing the industry-led efforts with regulatory mandates — particularly mandates implemented through the state-by-state, agreement-by-agreement process under § 252 — would result in wasteful expenditure of limited capital.

Much like the Internet, which is the most famous example of market-based interconnection, the IP-interconnected products and services for interexchange voice traffic today developed without regulatory intervention. The same market forces will continue to drive the evolution towards direct IP interconnection for termination of voice traffic. We explained that as the number of IP voice end points in a carrier's network grows and the demand for services possible only when the voice path remains IP end-to-end increases, companies will naturally seek interconnection arrangements that allow them to terminate incoming calls to their IP-capable end points in VoIP format most efficiently. But much more work needs to be done to address the myriad technical and operational issues that would enable IP-based interconnection on an industry-wide basis.

Finally, we discussed the importance of transitioning away from the legacy PSTN in order to take advantage of the efficiencies associated with new IP-based networks. Although IP-based networks open the door to innovative new products and services, companies cannot realize the efficiencies those networks promise if they are simultaneously required to expend resources to maintain backwards compatibility with the outdated legacy network. The aging legacy PSTN infrastructure is costly to maintain, and new IP-based networks should replace them, rather than supplement them.

Sincerely,

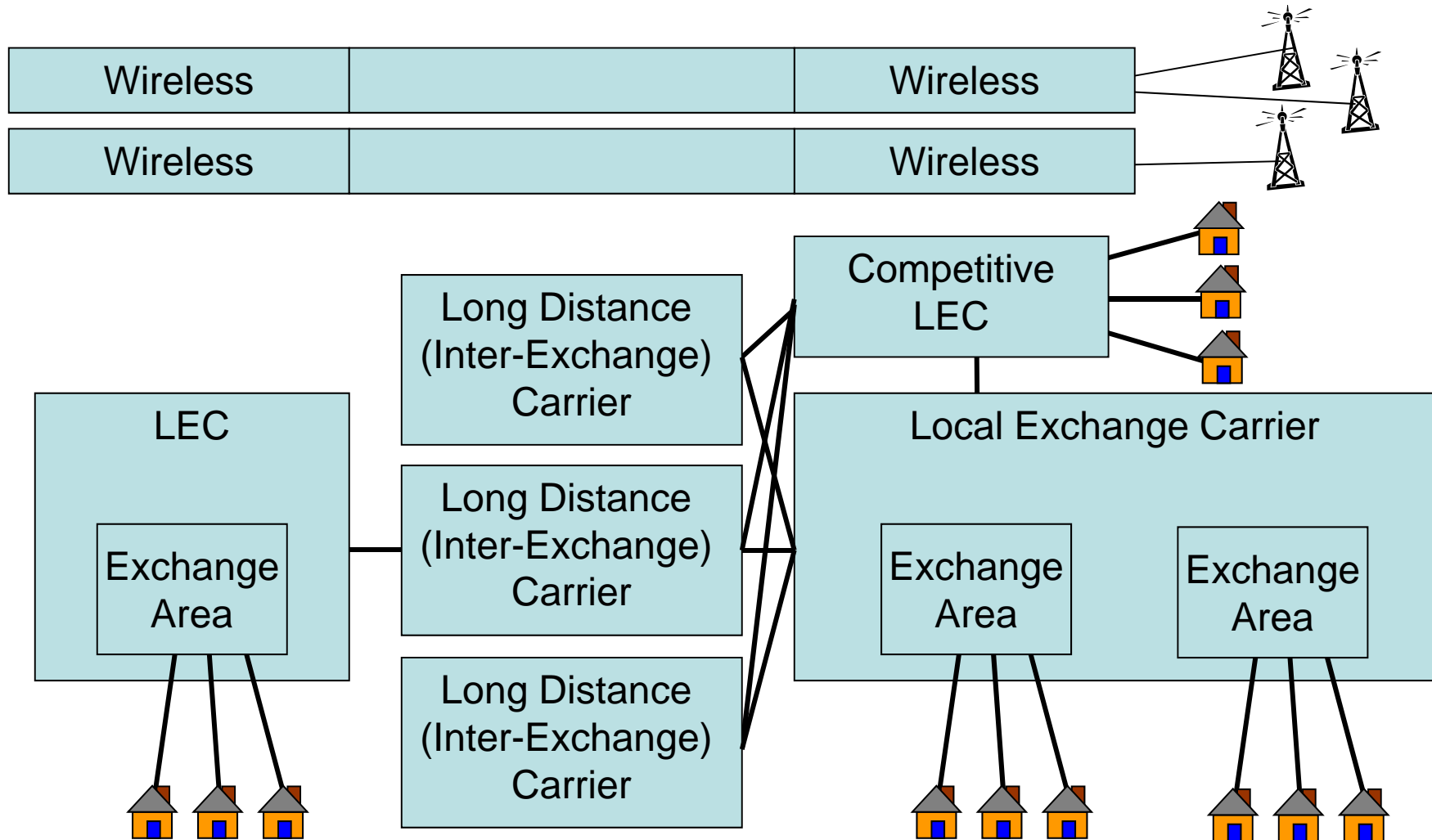
A handwritten signature in black ink, appearing to be "J. J. O'Connell", written in a cursive style.

Attachment

# IP Interconnection Discussion Slides

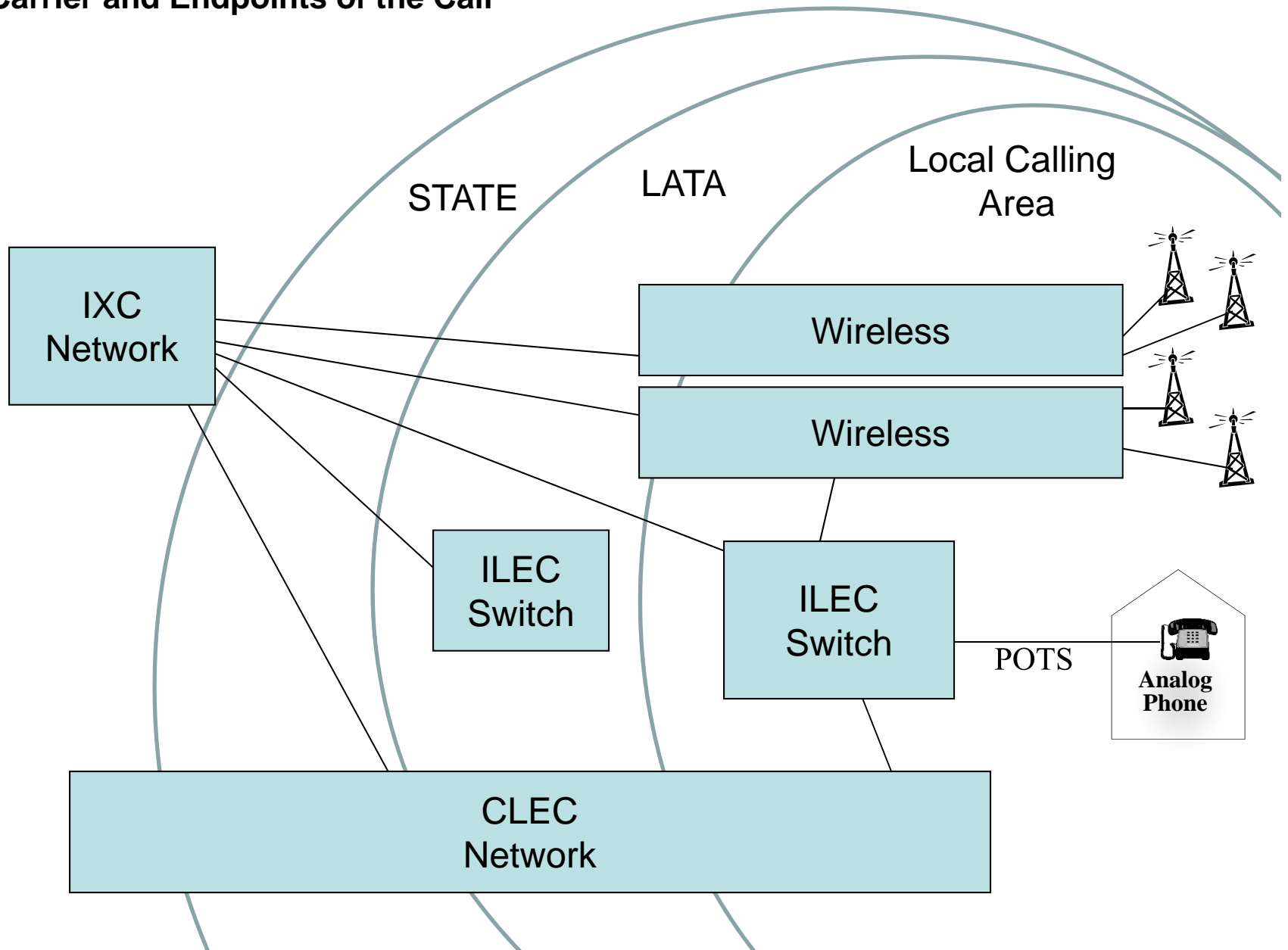
12/5/2011

# Legacy Telephone Interconnection

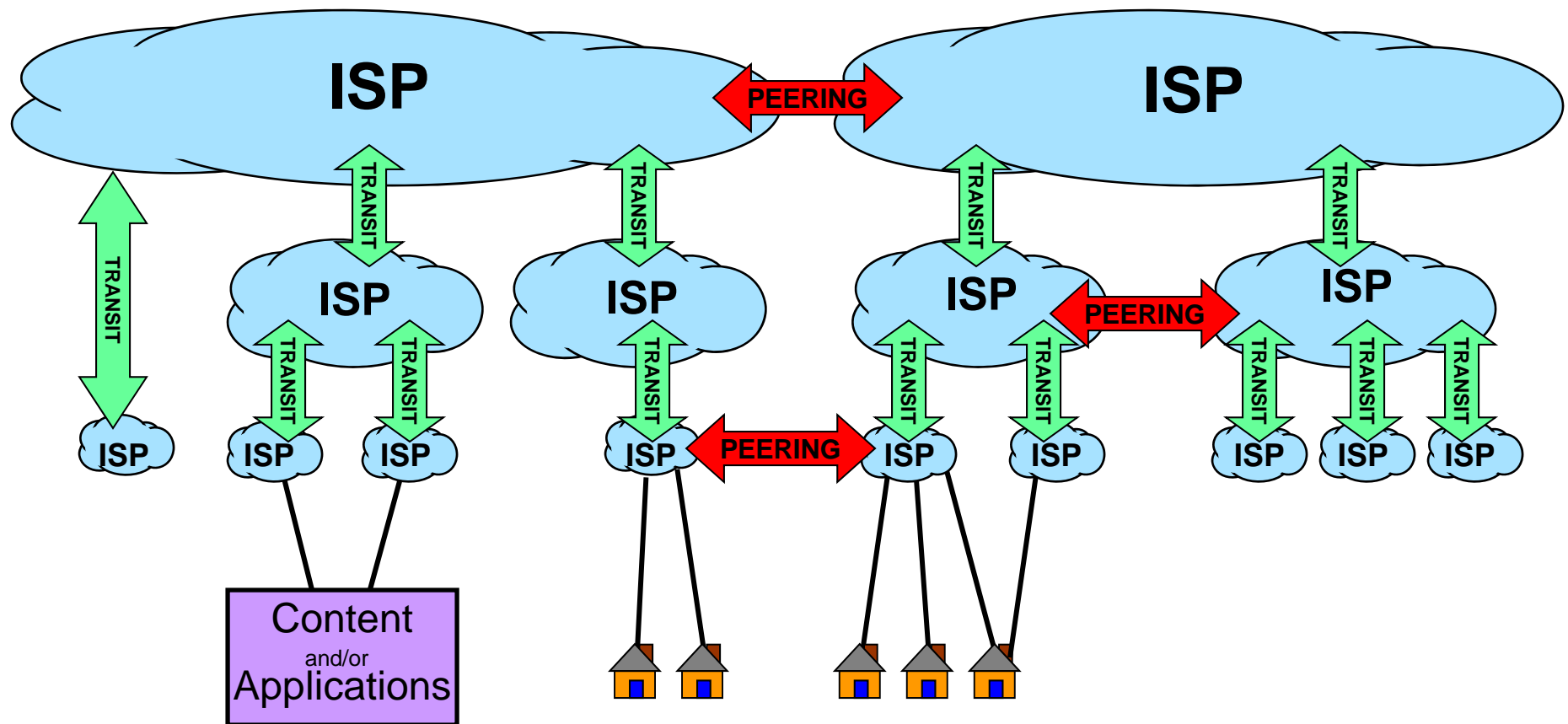


# Complex Regulated System

Type of Interconnection and Prices Charged Depended on the Type of Call,  
Type of Carrier and Endpoints of the Call

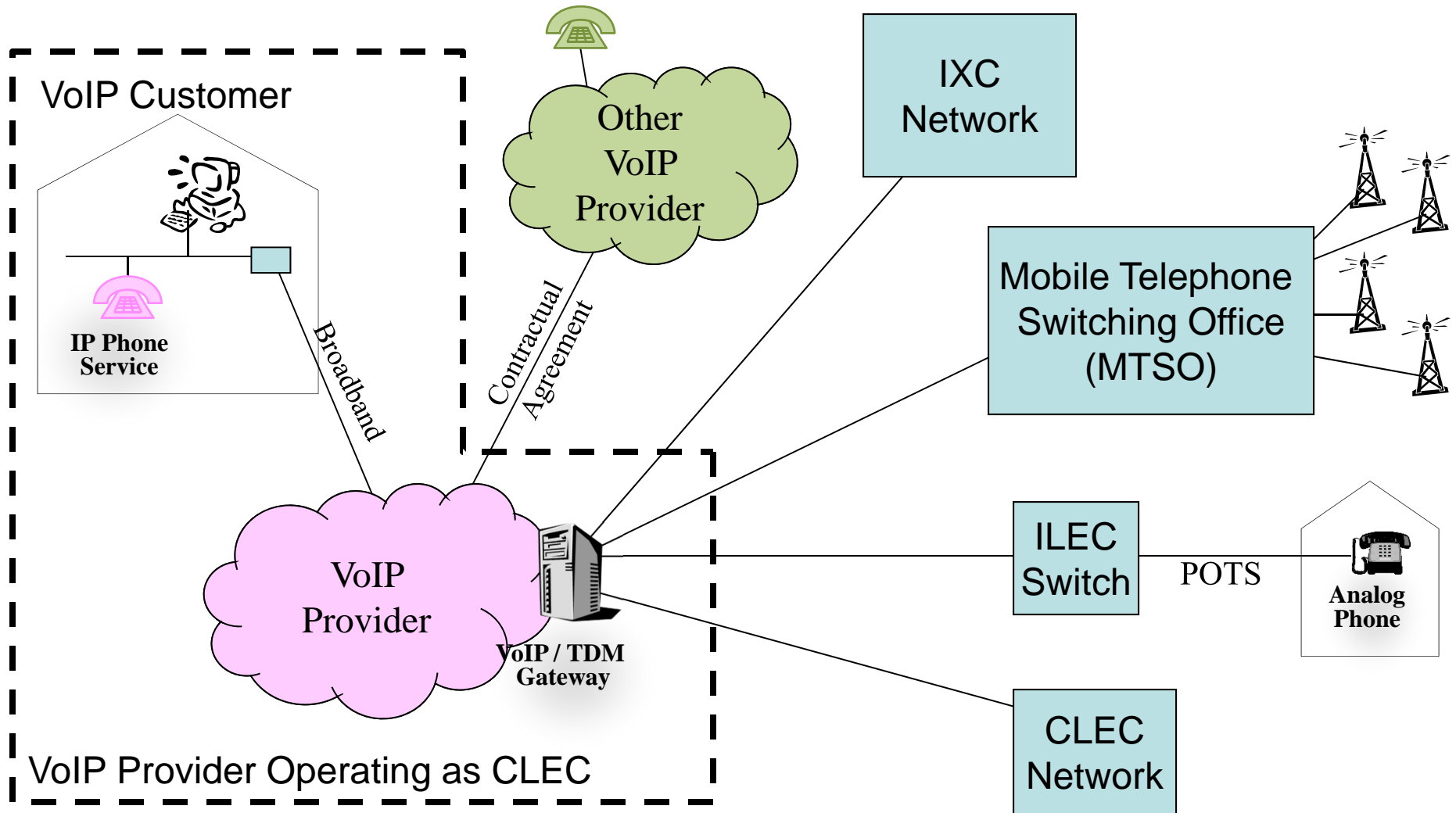


# Internet Interconnection



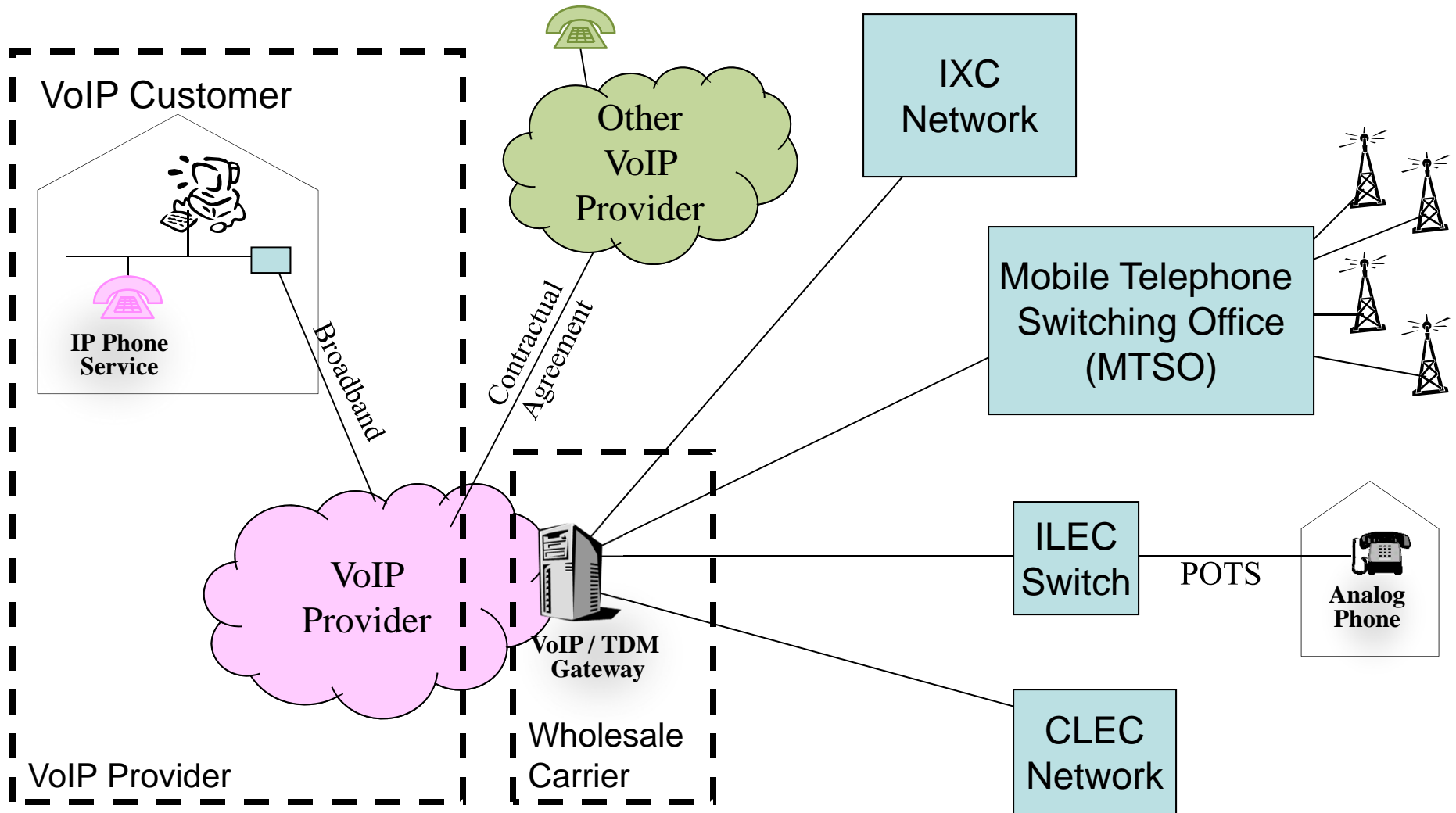
# VoIP Interconnection Today

VoIP Provider Operating as CLEC



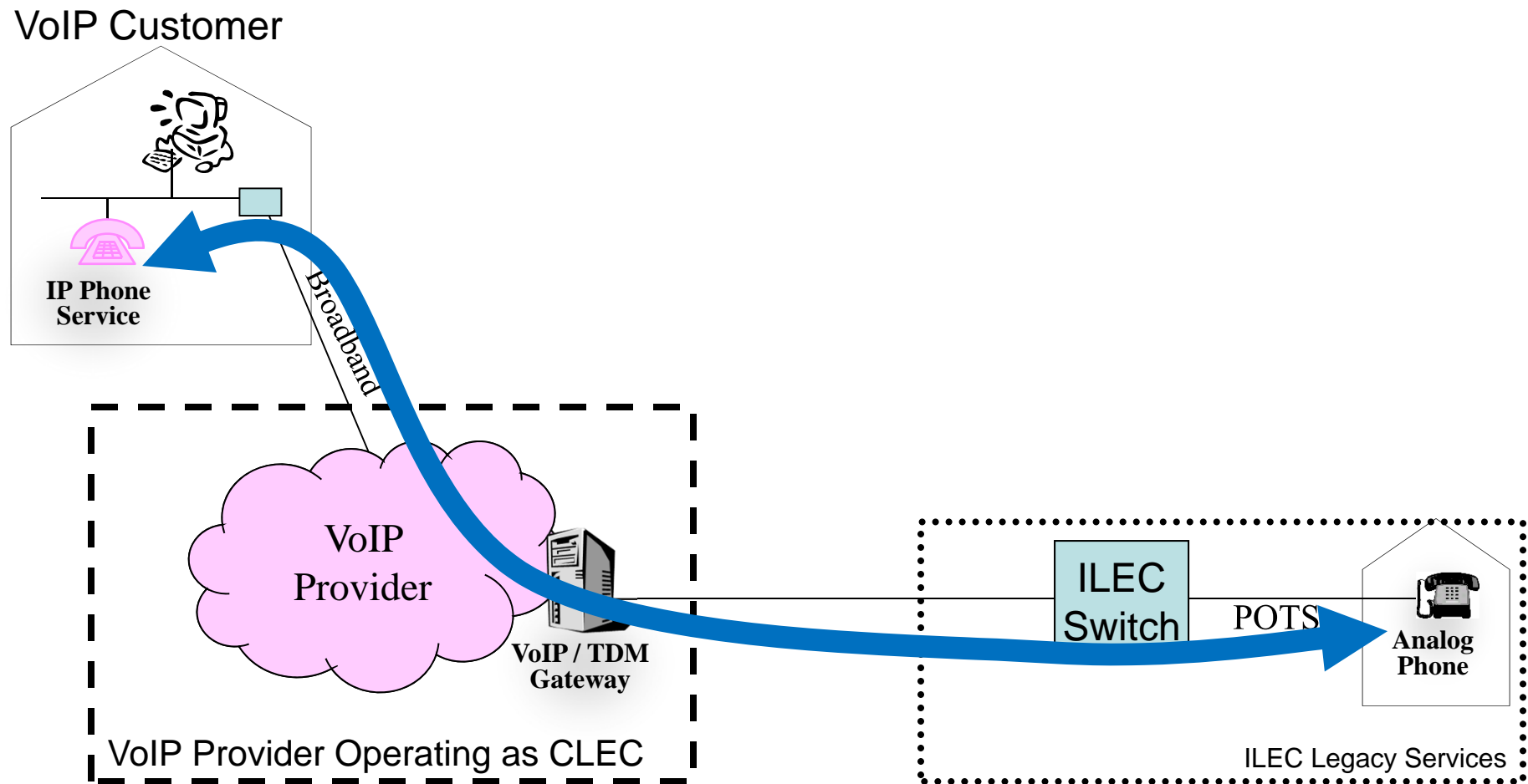
# VoIP Interconnection Today

VoIP Provider Partnering with Carrier





# VoIP Interconnection with ILEC TDM Customer Today



# VoIP Interconnection with ILEC VoIP Customer Today

